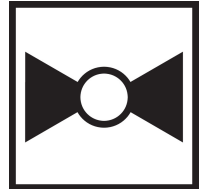


## Butterfly Valve with Grooved types

- Disc electroless nickel coated ductile iron
- Bubble tight shut-off
- Resilient seat
- Valve face-to-face dimensions comply with AWWA (c606) & MSS-SP-67
- Completely assembled and tested, ready for installation
- VIC-300 Masterseal is manufactured by the Victaulic Company.



5-year warranty



## Type overview

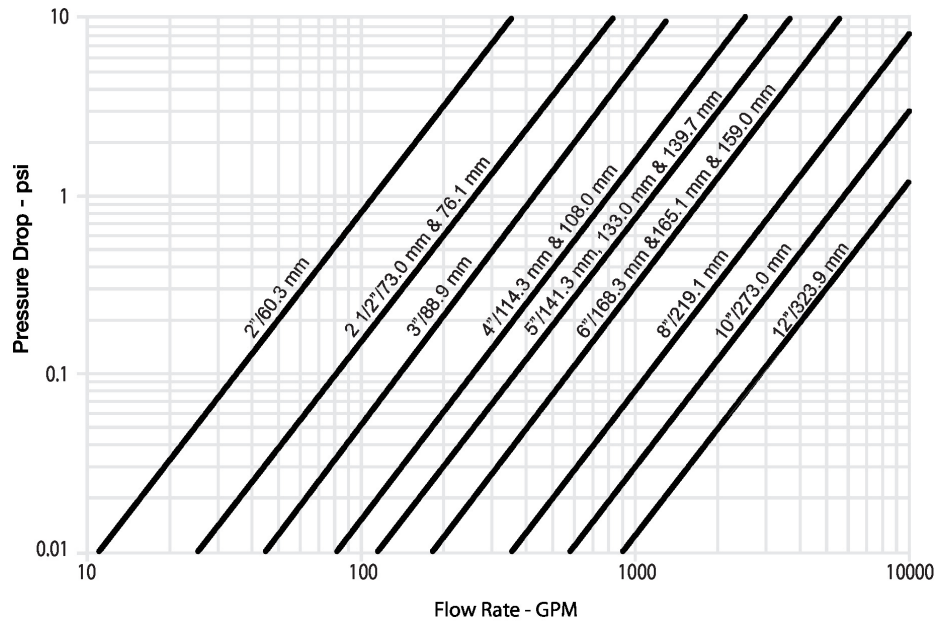
Type	DN
F680VIC	80

## Technical data

<b>Functional data</b>	Valve size [mm]	3" [80]
	Fluid	chilled or hot water, up to 60% glycol
	Fluid Temp Range (water)	-30...120°C [-22...250°F]
	Body Pressure Rating	ANSI Class Grooved AWWA, 300 psi
	Flow characteristic	modified equal percentage
	Leakage rate	0%
	Pipe connection	Grooved ANSI/AWWA (c606)
	Servicing	maintenance-free
	Flow Pattern	2-way
	Controllable flow range	90° rotation
	Cv	440
	Maximum Velocity	20 FPS
	<b>Materials</b>	Valve body
Body finish		black alkyd enamel
Stem		416 stainless steel
Stem seal		fiberglass with TFE lining
Seat		EPDM
Disc		electroless nickel coated ductile iron
<b>Suitable actuators</b>	Non Fail-Safe	GMB(X) GRCB(X) PRB(X)
	Spring	2*AFB(X)
	Electrical fail-safe	GKB(X)

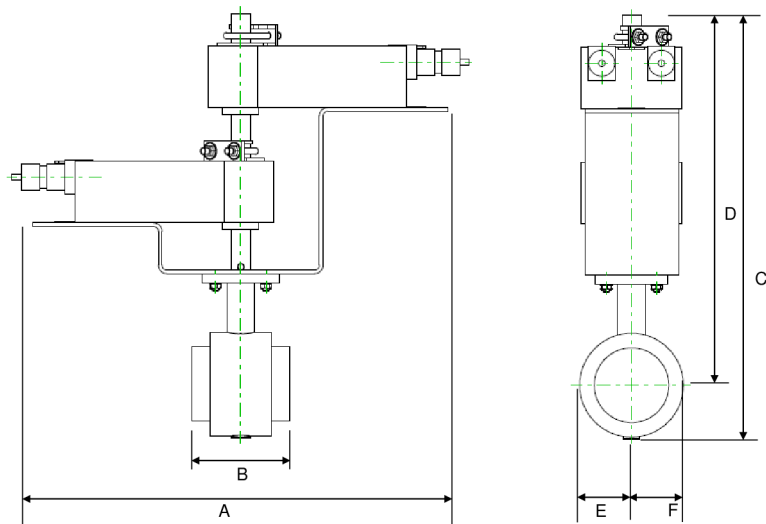
Product features

Flow/Mounting details



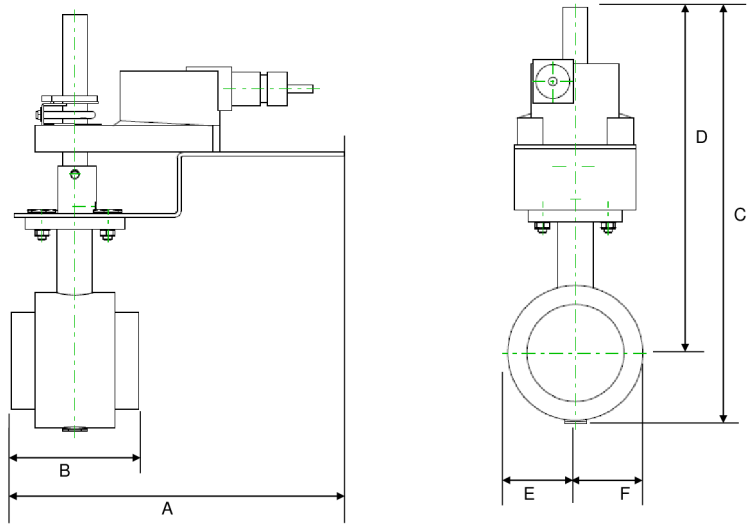
Dimensions

Type	DN	Weight
F680VIC	80	6.9 lb [3.2 kg]



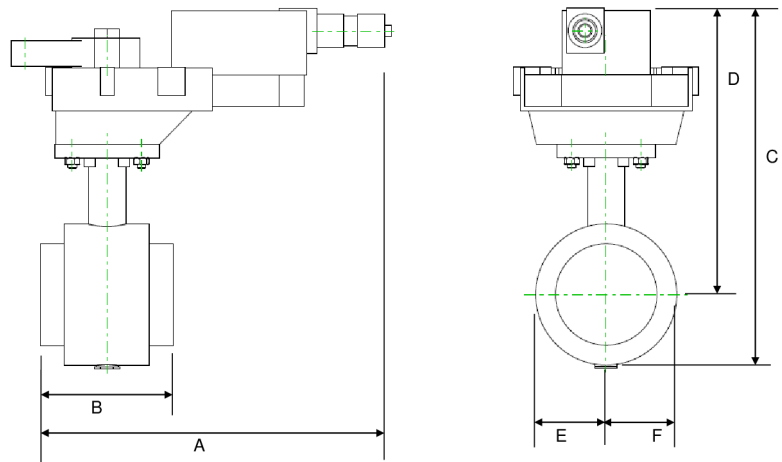
2\*AF

A	B	C	D	E	F
17.6" [448]	3.8" [97]	17.8" [451]	14.3" [363]	2.3" [58]	2.3" [58]



GK

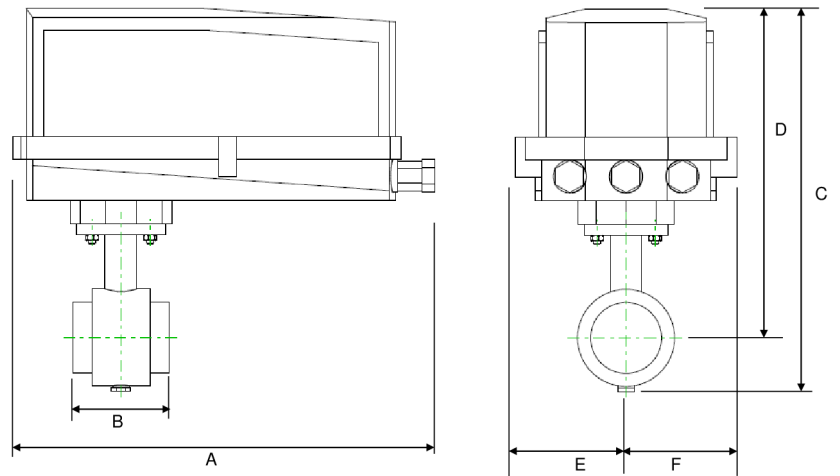
A	B	C	D	E	F
9.9" [251]	3.8" [97]	12.3" [312]	10.5" [267]	2.3" [58]	2.3" [58]



GR

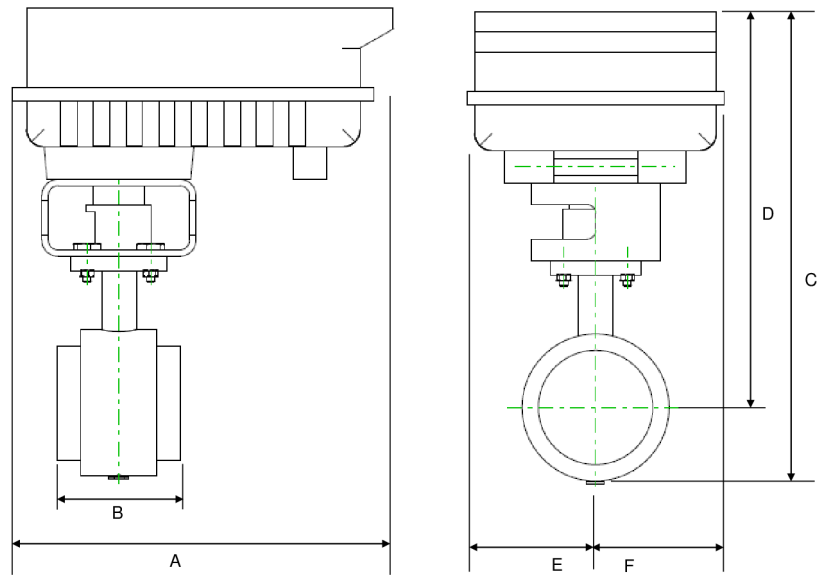
A	B	C	D	E	F
9.9" [251]	3.7" [95]	10.2" [260]	8.1" [206]	2.3" [58]	2.3" [58]

Dimensions



GR N4

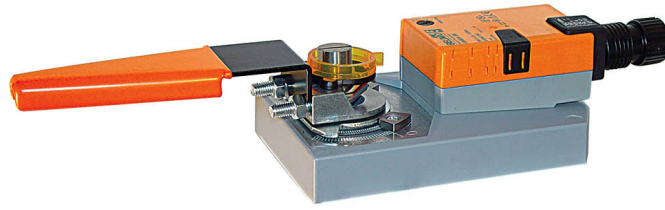
A	B	C	D	E	F
14.1" [358]	3.8" [97]	14.0" [356]	11.7" [298]	2.3" [58]	2.3" [58]



F6..VIC\_PR

A	B	C	D	E	F
11.7" [298]	3.8" [97]	14.5" [368]	12.1" [307]	8.0" [203]	8.0" [203]

On/Off, Floating point, Non fail-safe, 24 V



5-year warranty


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption in operation	4 W
	Power consumption in rest position	2 W
	Transformer sizing	6 VA
	Electrical Connection	18 GA plenum cable, 1 m, with 1/2" NPT conduit connector, degree of protection NEMA 2 / IP54
	Overload Protection	electronic throughout 0...95° rotation
<b>Functional data</b>	Torque motor	40 Nm
	Direction of motion motor	selectable with switch 0/1
	Manual override	external push button
	Angle of rotation	Max. 95°
	Angle of rotation note	adjustable with mechanical stop
	Running Time (Motor)	150 s / 90°
	Running time motor note	constant, independent of load
	Position indication	Mechanical, 30...65 mm stroke
<b>Safety data</b>	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02 CE acc. to 2014/30/EU and 2014/35/EU
	Quality Standard	ISO 9001
	UL 2043 Compliant	Suitable for use in air plenums per Section 300.22(C) of the NEC and Section 602 of the IMC
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-22...122°F [-30...50°C]
	Storage temperature	-40...176°F [-40...80°C]
	Servicing	maintenance-free
<b>Weight</b>	Weight	4.1 lb [1.9 kg]
<b>Materials</b>	Housing material	Galvanized steel and plastic housing

Technical data

**Footnotes** †Rated Impulse Voltage 800V, Type action 1, Control Pollution Degree 3.

Accessories

Electrical accessories	Description	Type
	Battery backup system, for non-spring return models	NSV24 US
	Battery, 12 V, 1.2 Ah (two required)	NSV-BAT
	Feedback potentiometer 140 Ω add-on, grey	P140A GR
	Feedback potentiometer 500 Ω add-on, grey	P500A GR
	Feedback potentiometer 1 kΩ add-on, grey	P1000A GR
	Feedback potentiometer 2.8 kΩ add-on, grey	P2800A GR
	Feedback potentiometer 5 kΩ add-on, grey	P5000A GR
	Feedback potentiometer 10 kΩ add-on, grey	P10000A GR
	Auxiliary switch 1x SPDT add-on	S1A
	Auxiliary switch 2x SPDT add-on	S2A

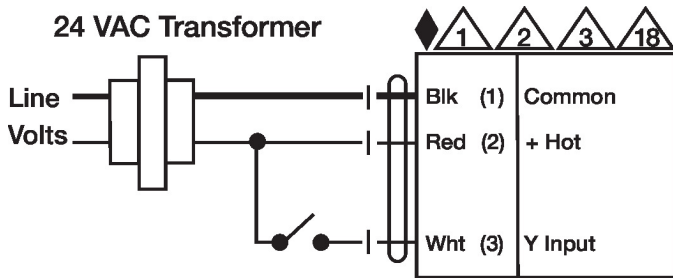
Electrical installation

**✂️ INSTALLATION NOTES**

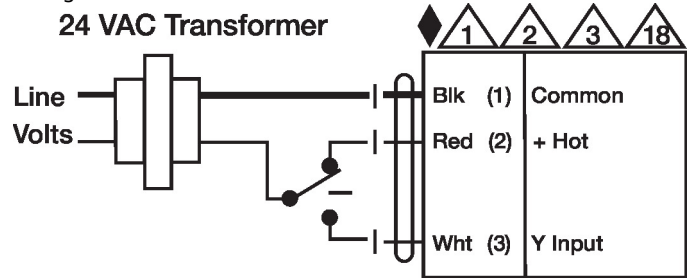
- (A)** Actuators with appliance cables are numbered.
- (1)** Provide overload protection and disconnect as required.
- (3)** Actuators may also be powered by DC 24 V.
- (6)** Actuators Hot wire must be connected to the control board common. Only connect common to neg. (-) leg of control circuits. Terminal models (-T) have no-feedback.
- (11)** Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.
- ◆** Meets cULus requirements without the need of an electrical ground connection.
- (1) Warning! Live electrical components!**  
 During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

**Wiring diagrams**

On/Off



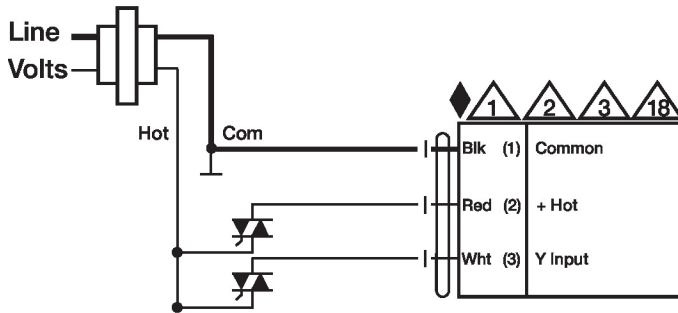
Floating Point



Electrical installation

Wiring diagrams

24 VAC Transformer



Floating Point - Triac Sink  
24 VAC Transformer

